

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for curing a fluorine-containing polymer having a structure of the formula:

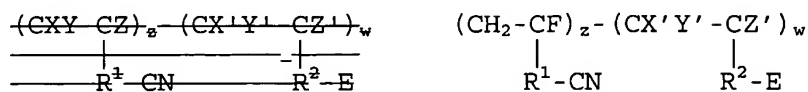


wherein ~~X, Y and Z represent independently each other a hydrogen atom, a fluorine atom, a chlorine atom, a bromine atom or an iodine atom, provided that at least one of X, Y and Z is a fluorine atom,~~ R represents a straight or branched fluorinated alkylene group having 1 to 20 carbon atoms which ~~may contain~~ optionally contains an oxygen atom; x and y represent mole percentages and x is from 1 to 100 % by mole; A is -CN, -NCO, -COOR' in which R' is a hydrogen atom or an alkyl group having 1 to 10 carbon atoms, or A is an acid anhydride group or A is an unsaturated hydrocarbon group; and M is a repeating unit derived from a copolymerizable monomer;

~~comprising~~ wherein the method comprises treating said polymer with ammonia and crosslinking said polymer through the side functional groups of said polymer.

2. (Currently Amended) The method according to claim 1, wherein ~~said~~ the cross-linked polymer ~~cured~~ is further heated at a temperature of at least 100°C.

3. (Currently Amended) A method for curing a fluorine-containing polymer having a structure of the formula:

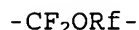


wherein ~~X, Y, Z,~~ X', Y' and Z' represent independently from each other a hydrogen atom, a fluorine atom, a chlorine atom, a bromine atom or an iodine atom, ~~provided that at least one of X, Y and Z is a fluorine atom;~~ R¹ and R² represent independently from each other a straight or branched fluorinated alkylene group having 1 to 20 carbon atoms which ~~may contain~~ optionally contains an oxygen atom; z and w represent mole percentages and z is from 1 to 100 % by mole; and E is ~~an organic group other than CN~~ -NCO, -COOR' in which R' is a hydrogen atom or an alkyl group having 1 to 10 carbon atoms, an acid hydride group, an unsaturated hydrocarbon group, a straight or branched alkyl group having 1 to 20 carbon atoms in which a part or all of the hydrogen atoms are optionally substituted with a chlorine atom or a fluorine atom or the alkyl group optionally contains an oxygen atom;

~~comprising~~ wherein the method comprises curing said polymer in the presence of a base.

4. (Currently Amended) The method according to claim 3, wherein ~~X and Y are hydrogen atoms, Z is a fluorine atom, and R¹ R² is a~~

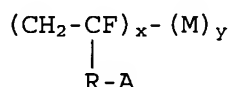
group of the formula:



wherein Rf is a fluorinated alkylene group having 1 to 20 carbon atoms.

5. (Currently Amended) The method according to claim 3 or 4, wherein said ~~polymer~~ cured polymer is further heated at a temperature of at least 100°C.

6. (Currently Amended) A method for curing a fluorine-containing polymer having a structure of the formula:



wherein R is a group of the formula: $-\text{CF}_2\text{ORf}-$ in which Rf is a fluorinated alkylene group having 1 to 20 carbon atoms which may contain an oxygen atom; x and y represent mole percentages and x is from 1 to 100 % by mole; A is $-\text{CN}$, $-\text{NCO}$, $-\text{COOR}'$ in which R' is a hydrogen atom or an alkyl group having 1 to 10 carbon atoms, or A is an acid anhydride group or A is an unsaturated hydrocarbon group; and M is a repeating unit derived from a copolymerizable monomer; ~~comprising~~ wherein the method comprises treating said polymer with at least one compound selected from the group consisting of

ammonia, diamines and polyol compounds and crosslinking said polymer through the side functional groups of said polymer.

7. (Currently Amended) The method according to claim 6, wherein said ~~polymer~~ cured polymer is further heated at a temperature of at least 100°C.